
The Autonomy Levels and the Human Intervention Levels of Robots: The Impact of Robot Types in Human–Robot Interaction

Jung Ju Choi

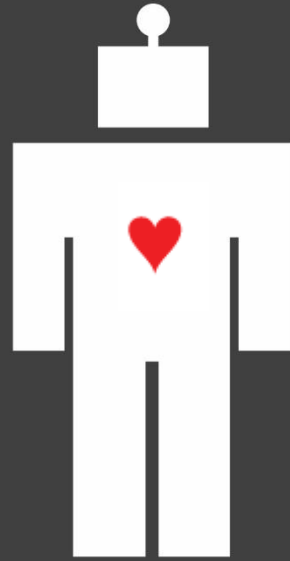
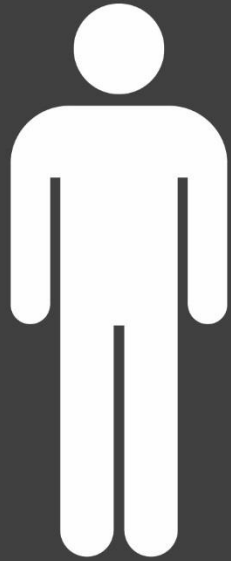
Ewha Womans University

Yunkyung Kim

Korea Advanced Institute
of Science and Technology

Sonya S. Kwak

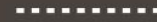
Ewha Womans University



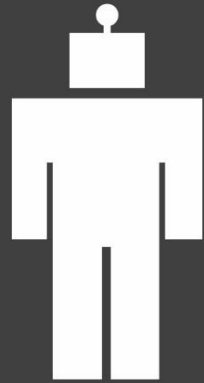


Autonomous Robot

vs.



Tele-operated Robot



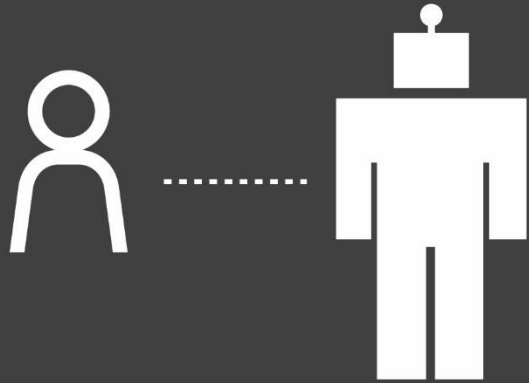
Autonomous robot

Autonomy Level



Human Intervention Level





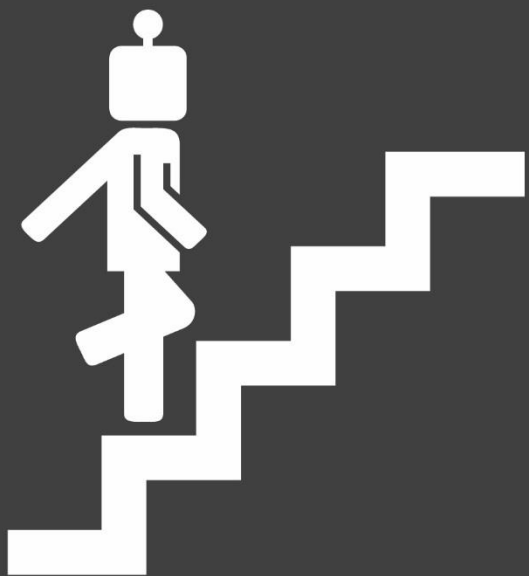
Tele-operated Robot

Autonomy Level

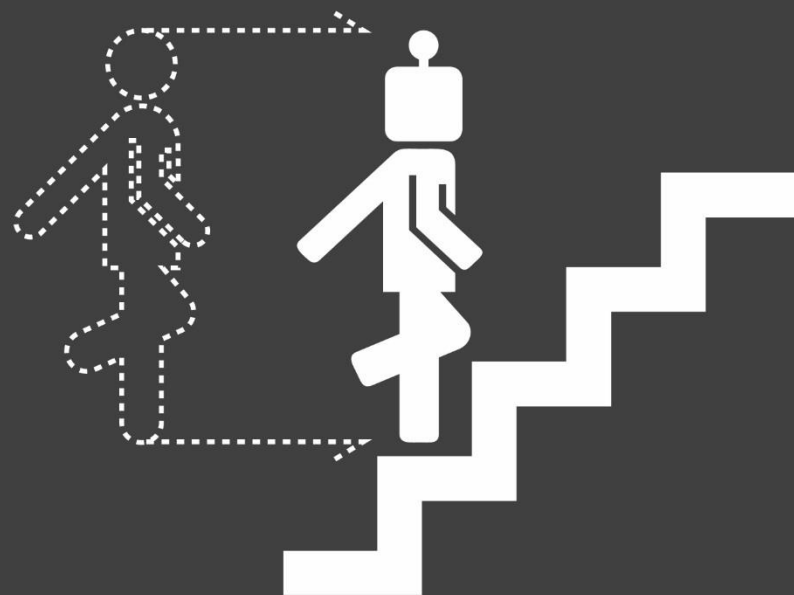


Human Intervention Level

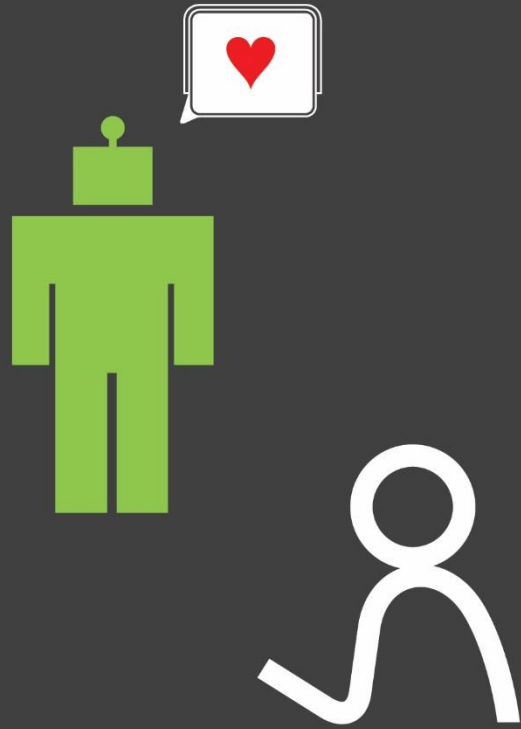




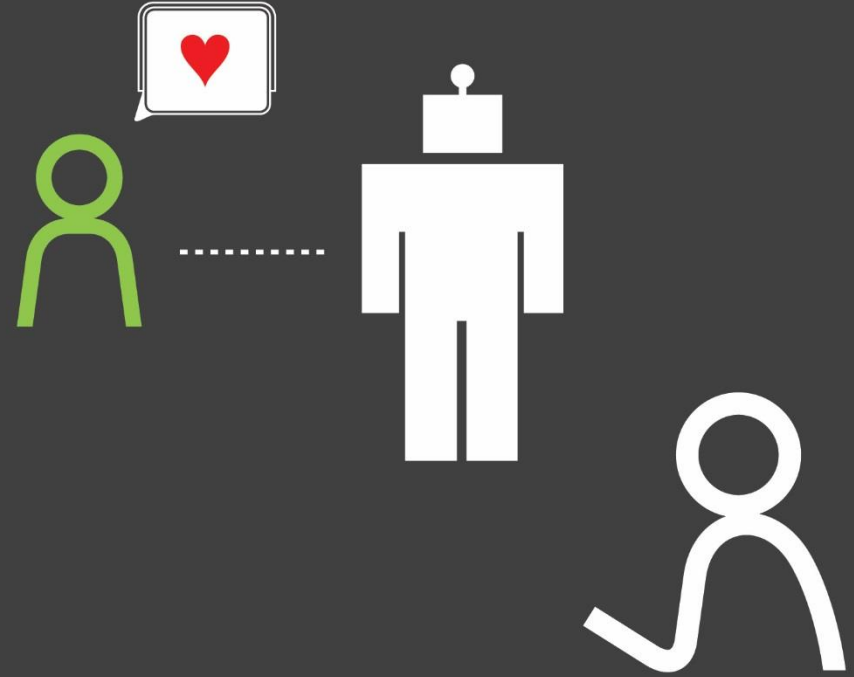
Autonomous Robot



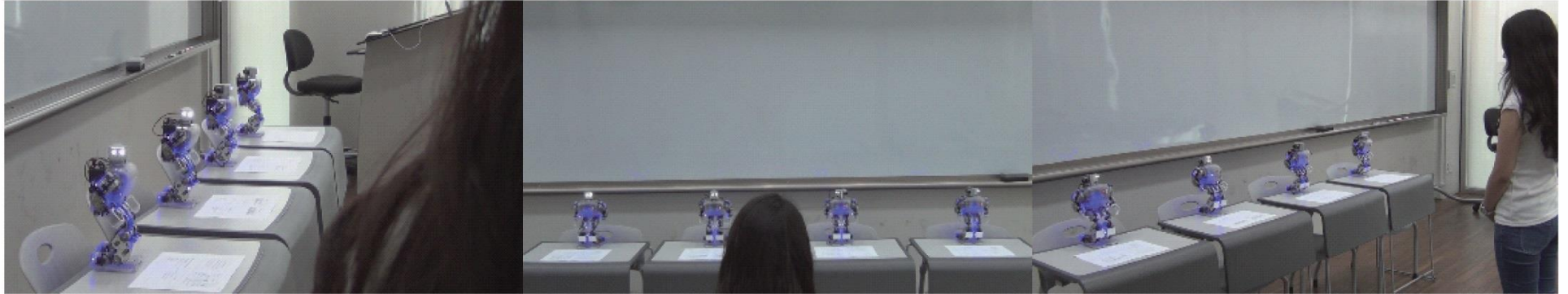
Tele-operated Robot



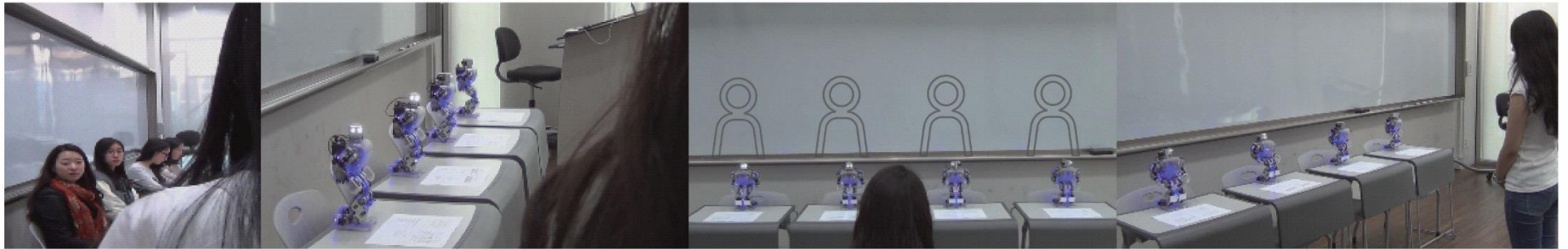
Autonomous Robot



Tele-operated Robot



Autonomous Robots



Tele-operated Robots



Intelligence (5items, Cronbach's $\alpha = .82$)

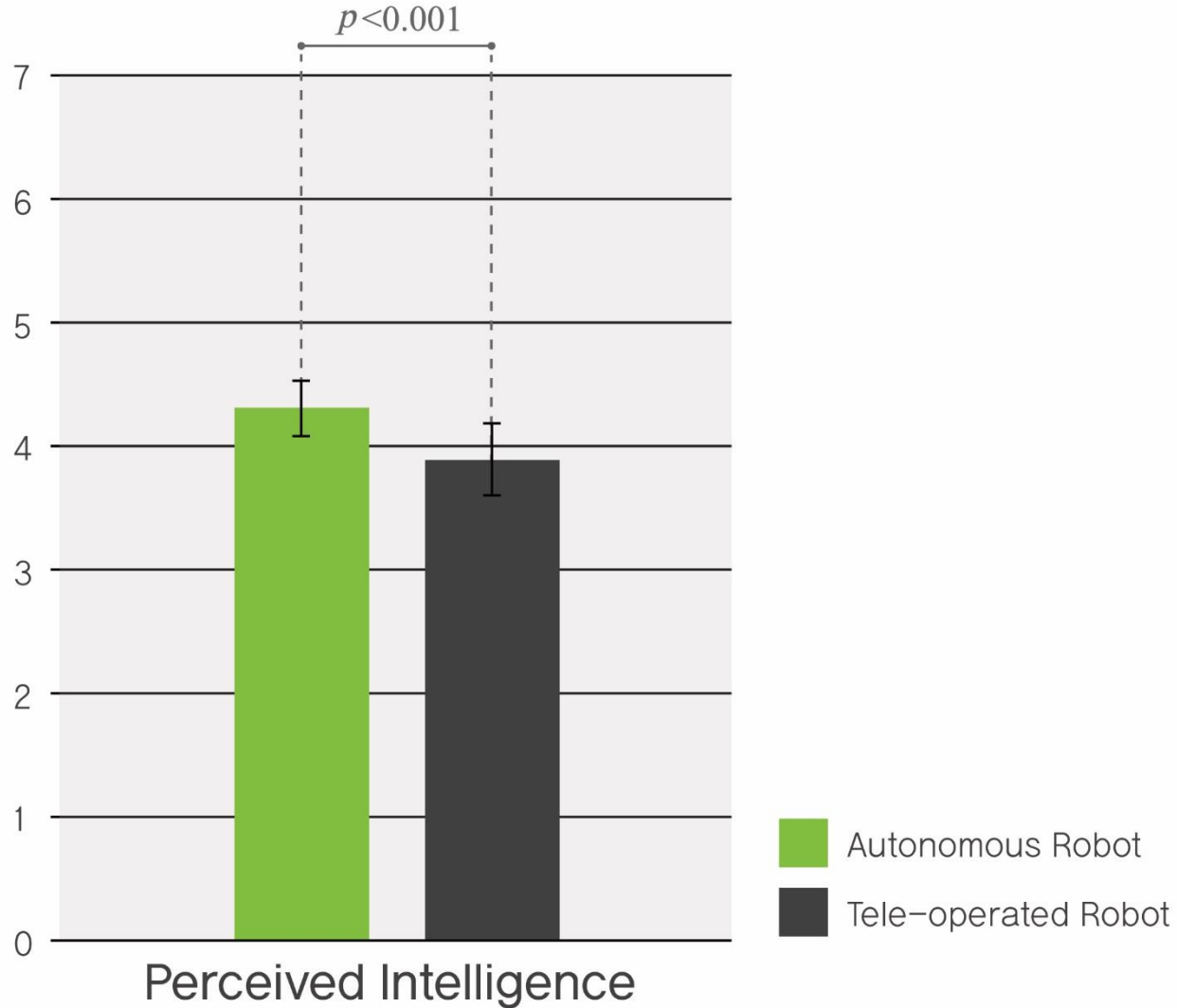
(Bartneck et al., 2009)



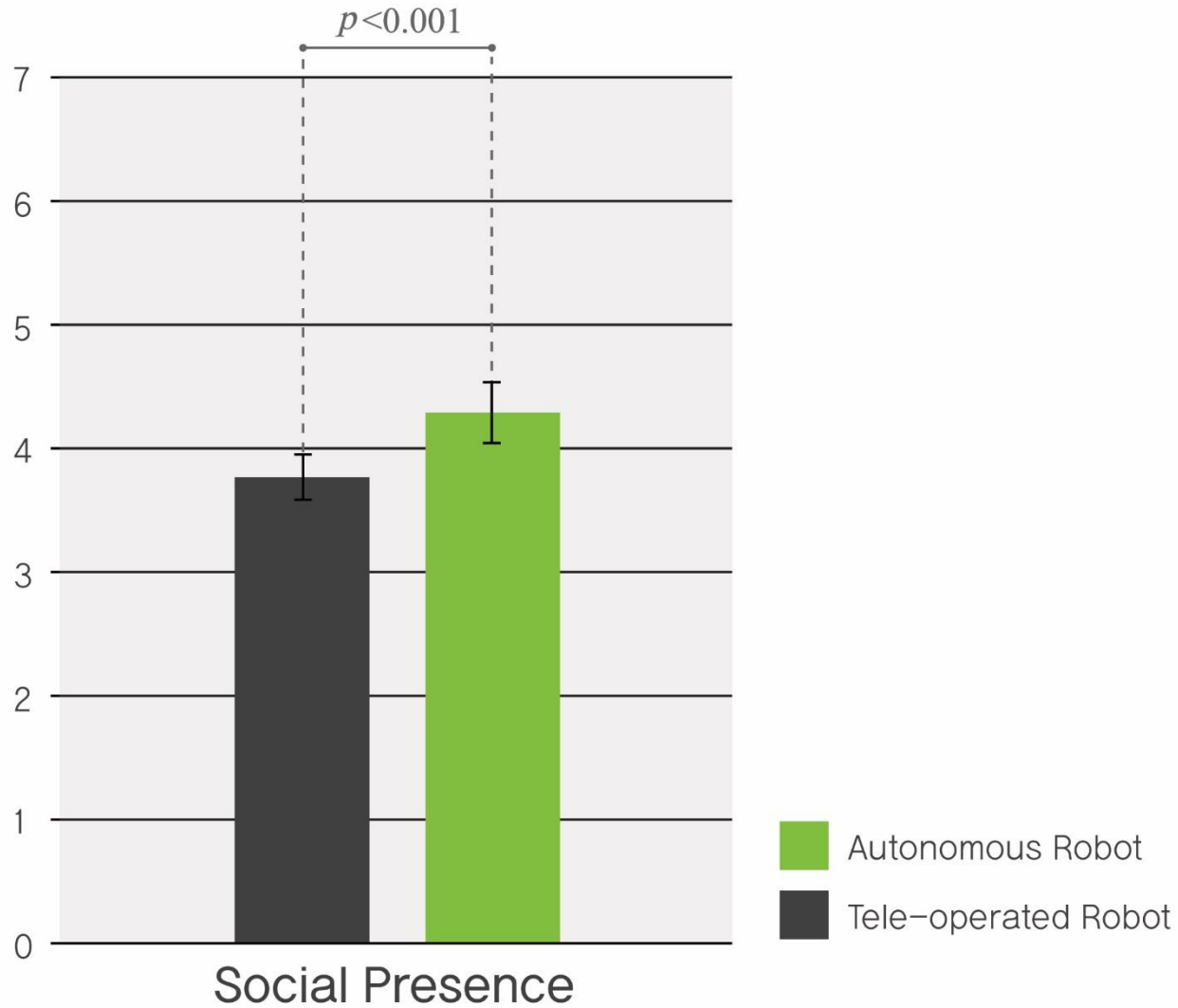
Social Presence (5items, Cronbach's $\alpha = .93$)

(Heerink et al., 2008)

H1. Participants will perceive autonomous robots as more intelligent than tele-operated robots. ✓



H2. Participants will feel more social presence to tele-operated robots than autonomous robots. ✓





Autonomous Robot

vs.



Tele-operated Robot